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May 30, 2017

VIA ELECTRONIC FILING

The Honorable Jocelyn G. Boyd
Chief Clerk/Administrator
Public Service Commission of South Carolina
101 Executive Center Drive, Suite 100
Columbia, South Carolina 29210

Re: **Duke Energy Progress, LLC – Monthly Power Plant Performance Report**
Docket No. 2006-224-E

Dear Mrs. Boyd:

Pursuant to the Commission's Orders in Docket No. 1977-354-E, enclosed for filing is the Monthly Power Plant Performance Report in Docket No. 2006-224-E for the month of April 2017.

Should you have any questions regarding this matter, please do not hesitate to contact me at 803.988.7130.

Sincerely,

Rebecca J. Dulin

Enclosure

cc: Ms. Dawn Hipp, Office of Regulatory Staff
Mr. Jeffrey M. Nelson, Office of Regulatory Staff
Ms. Shannon Bowyer Hudson, Office of Regulatory Staff
Ms. Nanette Edwards, Office of Regulatory Staff
Michael Seaman-Huynh, Office of Regulatory Staff
Ms. Heather Shirley Smith, Duke Energy
Mr. Scott Elliott, Elliott & Elliott, P.A.
Mr. Garrett Stone, Brickfield, Burchette, Ritts & Stone, PC
Mr. Gary Walsh, Walsh Consulting, LLC

Duke Energy Progress
Base Load Power Plant Performance Review Plan

Period: April, 2017

Station	Unit	Date of Outage	Duration of Outage	Scheduled / Unscheduled	Cause of Outage	Reason Outage Occurred	Remedial Action Taken
Brunswick	1	04/25/2017 - 04/29/2017	75.32	Scheduled	Maintenance outage to replace 1B reactor recirculating pump seal	1B reactor recirculating pump seal failure	Replaced reactor recirculating pump seal
	2	03/17/2017 - 04/15/2017	358.03	Scheduled	End-of-cycle 23 refueling outage (B223R1)	Refuel and maintenance	Refuel and maintenance
	2	04/15/2017 - 04/17/2017	44.23	Scheduled	Outage extended due to high vibration in main turbine	Turbine rub caused high vibration	Rotated turbine to eliminate the rub
	2	04/18/2017 - 04/18/2017	1.88	Scheduled	Turbine overspeed trip test	Required turbine overspeed trip test	Performed turbine overspeed trip test
Harris	1	None					
Robinson	2	02/25/2017 - 04/08/2017	173.15	Scheduled	End-of-cycle 30 refueling outage (R030)	Refuel and maintenance including stator replacement	Refuel and maintenance including stator replacement

Duke Energy Progress
Base Load Power Plant
Performance Review Plan
April 2017

Lee Energy Complex

Unit	Duration of Outage	Type of Outage	Cause of Outage		Reason Outage Occurred	Remedial Action Taken
1A	4/1/2017 12:37:00 AM To 4/6/2017 11:31:00 AM	Sch	5274	General Gas Turbine Unit Inspection	CT and BOP outage to perform General Corrective Maitenance items	
1A	4/6/2017 11:53:00 AM To 4/6/2017 1:52:00 PM	Sch	5041	Gas Turbine - Fuel Piping And Valves	Fuel oil system relief valve lifted during fuel swap attempt	
ST1	4/25/2017 12:37:00 AM To 4/30/2017 7:40:00 AM	Unsch	4520	Gen. Stator Windings; Bushings; And Terminals	Turbine tripped to 86 Lockout. Suspect water intrusion into VT Cabinet	

Notes:

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Duke Energy Progress
Base Load Power Plant
Performance Review Plan
April 2017

Richmond County Station

Unit	Duration of Outage	Type of Outage	Cause of Outage		Reason Outage Occurred	Remedial Action Taken
7	3/25/2017 5:45:00 AM To 4/8/2017 5:54:00 PM	Sch	5272	Gas Turbine - Boroscope Inspection	U7 Borescope	
7	4/10/2017 3:03:00 AM To 4/10/2017 5:11:00 AM	Unsch	5041	Gas Turbine - Fuel Piping And Valves	U7 P2 vent valve failure	
8	3/25/2017 5:45:00 AM To 4/8/2017 6:18:00 PM	Sch	5272	Gas Turbine - Boroscope Inspection	U8 Borescope	
ST4	3/25/2017 5:12:00 AM To 4/9/2017 7:15:00 AM	Sch	4401	Inspection	Steam Turbine Outage	
9	4/15/2017 12:31:00 AM To 4/28/2017 8:25:00 PM	Sch	5272	Gas Turbine - Boroscope Inspection	U9 boroscope	
9	4/28/2017 11:01:00 PM To 4/29/2017 3:25:00 AM	Sch	5048	Gas Fuel System with controls and instruments	Bladepath T/C trouble	
9	4/29/2017 5:25:00 AM To 4/29/2017 5:55:00 AM	Unsch	5041	Gas Turbine - Fuel Piping And Valves	Blade path spread trouble.	
9	4/29/2017 9:17:00 AM To 4/30/2017 8:56:00 AM	Sch	5048	Gas Fuel System with controls and instruments	Clean C stage gas fuel strainers.	
10	4/15/2017 12:31:00 AM To 4/28/2017 8:24:00 PM	Sch	5272	Gas Turbine - Boroscope Inspection	U10 boroscope	
10	4/28/2017 11:01:00 PM To 4/29/2017 1:41:00 AM	Sch	4499	Other Miscellaneous Steam Turbine Problems	Out of emissions time due to problem with ST5.	
ST5	4/14/2017 11:43:00 PM To 4/29/2017 3:58:00 AM	Sch	5272	Gas Turbine - Boroscope Inspection	U9 and U10 boroscope	
ST5	4/29/2017 5:56:00 AM To 4/29/2017 7:44:00 AM	Unsch	4499	Other Miscellaneous Steam Turbine Problems	Tripped to U9 IP drum level.	

Sutton Energy Complex

No Outages at Baseload Units During the Month.

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Duke Energy Progress
Base Load Power Plant Performance Review Plan

April 2017
Brunswick Nuclear Station

	Unit 1		Unit 2	
(A) MDC (mW)	938		932	
(B) Period Hours	720		720	
(C) Net Gen (mWh) and Capacity Factor (%)	602,816	89.26	244,481	36.43
(D) Net mWh Not Gen due to Full Schedule Outages	70,647	10.46	376,668	56.13
* (E) Net mWh Not Gen due to Partial Scheduled Outages	1,897	0.28	44,553	6.64
(F) Net mWh Not Gen due to Full Forced Outages	0	0.00	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	0	0.00	5,338	0.80
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00	0	0.00
* (I) Core Conservation	0	0.00	0	0.00
(J) Net mWh Possible in Period	675,360	100.00%	671,040	100.00%
(K) Equivalent Availability (%)		87.18		36.81
(L) Output Factor (%)		99.69		83.05
(M) Heat Rate (BTU/NkWh)		10,414		11,595

*** Estimate**
FOOTNOTE: D and F Include Ramping Losses

Duke Energy Progress
Base Load Power Plant Performance Review Plan

April 2017
Harris Nuclear Station

	Unit 1	
(A) MDC (mW)	928	
(B) Period Hours	720	
(C) Net Gen (mWh) and Capacity Factor (%)	688,333	103.02
(D) Net mWh Not Gen due to Full Schedule Outages	0	0.00
* (E) Net mWh Not Gen due to Partial Scheduled Outages	295	0.04
(F) Net mWh Not Gen due to Full Forced Outages	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	-20,468	-3.06
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00
* (I) Core Conservation	0	0.00
(J) Net mWh Possible in Period	668,160	100.00%
(K) Equivalent Availability (%)		99.96
(L) Output Factor (%)		103.02
(M) Heat Rate (BTU/NkWh)		10,519

*** Estimate**
FOOTNOTE: D and F Include Ramping Losses

Duke Energy Progress
Base Load Power Plant Performance Review Plan

April 2017
Robinson Nuclear Station

	Unit 2	
(A) MDC (mW)	741	
(B) Period Hours	720	
(C) Net Gen (mWh) and Capacity Factor (%)	392,198	73.51
(D) Net mWh Not Gen due to Full Schedule Outages	128,304	24.05
* (E) Net mWh Not Gen due to Partial Scheduled Outages	13,018	2.44
(F) Net mWh Not Gen due to Full Forced Outages	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	0	0.00
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00
* (I) Core Conservation	0	0.00
(J) Net mWh Possible in Period	533,520	100.00%
(K) Equivalent Availability (%)		72.51
(L) Output Factor (%)		96.79
(M) Heat Rate (BTU/NkWh)		10,533

*** Estimate**
FOOTNOTE: D and F Include Ramping Losses

Duke Energy Progress
Base Load Power Plant
Performance Review Plan
April 2017

Lee Energy Complex

	Unit 1A	Unit 1B	Unit 1C	Unit ST1	Block Total
(A) MDC (mW)	223	222	223	379	1,047
(B) Period Hrs	720	720	720	720	720
(C) Net Generation (mWh)	97,963	122,289	124,159	183,431	527,842
(D) Capacity Factor (%)	61.01	76.51	77.33	67.22	70.02
(E) Net mWh Not Generated due to Full Scheduled Outages	29,633	0	0	0	29,633
(F) Scheduled Outages: percent of Period Hrs	18.46	0.00	0.00	0.00	3.93
(G) Net mWh Not Generated due to Partial Scheduled Outages	15,559	18,720	19,080	16,086	69,445
(H) Scheduled Derates: percent of Period Hrs	9.69	11.71	11.88	5.89	9.21
(I) Net mWh Not Generated due to Full Forced Outages	0	0	0	48,417	48,417
(J) Forced Outages: percent of Period Hrs	0.00	0.00	0.00	17.74	6.42
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	17,405	18,831	17,321	24,945	78,503
(N) Economic Dispatch: percent of Period Hrs	10.84	11.78	10.79	9.14	10.41
(O) Net mWh Possible in Period	160,560	159,840	160,560	272,880	753,840
(P) Equivalent Availability (%)	71.85	88.29	88.12	76.36	80.43
(Q) Output Factor (%)	75.99	77.51	78.39	81.72	78.84
(R) Heat Rate (BTU/NkWh)	9,925	9,735	9,594	3,648	7,622

Notes:

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- (R) Includes Light Off BTU's

Duke Energy Progress
Base Load Power Plant
Performance Review Plan
April 2017

Richmond County Station

	Unit 7	Unit 8	Unit ST4	Block Total
(A) MDC (mW)	189	189	175	553
(B) Period Hrs	720	720	720	720
(C) Net Generation (mWh)	82,360	81,576	93,251	257,187
(D) Capacity Factor (%)	60.52	59.95	74.01	64.59
(E) Net mWh Not Generated due to Full Scheduled Outages	35,135	35,211	34,869	105,215
(F) Scheduled Outages: percent of Period Hrs	25.82	25.88	27.67	26.43
(G) Net mWh Not Generated due to Partial Scheduled Outages	9,309	9,607	1,562	20,478
(H) Scheduled Derates: percent of Period Hrs	6.84	7.06	1.24	5.14
(I) Net mWh Not Generated due to Full Forced Outages	403	0	0	403
(J) Forced Outages: percent of Period Hrs	0.30	0.00	0.00	0.10
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	8,872	9,687	0	18,559
(N) Economic Dispatch: percent of Period Hrs	6.52	7.12	0.00	4.66
(O) Net mWh Possible in Period	136,080	136,080	126,000	398,160
(P) Equivalent Availability (%)	67.04	67.07	71.09	68.33
(Q) Output Factor (%)	83.26	82.25	102.33	88.92
(R) Heat Rate (BTU/NkWh)	11,226	11,175	0	7,140

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Duke Energy Progress
Base Load Power Plant
Performance Review Plan
April 2017

Richmond County Station

	Unit 9	Unit 10	Unit ST5	Block Total
(A) MDC (mW)	214	214	248	676
(B) Period Hrs	720	720	720	720
(C) Net Generation (mWh)	59,133	66,064	83,225	208,422
(D) Capacity Factor (%)	38.38	42.88	46.61	42.82
(E) Net mWh Not Generated due to Full Scheduled Outages	79,768	71,594	84,382	235,744
(F) Scheduled Outages: percent of Period Hrs	51.77	46.47	47.26	48.44
(G) Net mWh Not Generated due to Partial Scheduled Outages	6,935	7,516	378	14,829
(H) Scheduled Derates: percent of Period Hrs	4.50	4.88	0.21	3.05
(I) Net mWh Not Generated due to Full Forced Outages	107	0	446	553
(J) Forced Outages: percent of Period Hrs	0.07	0.00	0.25	0.11
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	8,137	8,906	10,129	27,171
(N) Economic Dispatch: percent of Period Hrs	5.28	5.78	5.67	5.58
(O) Net mWh Possible in Period	154,080	154,080	178,560	486,720
(P) Equivalent Availability (%)	43.66	48.66	52.28	48.40
(Q) Output Factor (%)	79.69	80.09	88.79	83.23
(R) Heat Rate (BTU/NkWh)	11,712	11,554	0	6,985

Notes:

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- (R) Includes Light Off BTU's

Duke Energy Progress
Base Load Power Plant
Performance Review Plan
April 2017

Sutton Energy Complex

	Unit 1A	Unit 1B	Unit ST1	Block Total
(A) MDC (mW)	225	225	267	717
(B) Period Hrs	720	720	720	720
(C) Net Generation (mWh)	126,843	127,214	145,140	399,197
(D) Capacity Factor (%)	78.30	78.53	75.50	77.33
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	19,800	19,440	360	39,600
(H) Scheduled Derates: percent of Period Hrs	12.22	12.00	0.19	7.67
(I) Net mWh Not Generated due to Full Forced Outages	0	0	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	15,357	15,346	46,740	77,443
(N) Economic Dispatch: percent of Period Hrs	9.48	9.47	24.31	15.00
(O) Net mWh Possible in Period	162,000	162,000	192,240	516,240
(P) Equivalent Availability (%)	87.78	88.00	99.81	92.33
(Q) Output Factor (%)	78.30	78.53	75.50	77.33
(R) Heat Rate (BTU/NkWh)	11,011	10,918	0	6,978

Notes:

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- (R) Includes Light Off BTU's

Duke Energy Progress
Intermediate Power Plant Performance
Review Plan
April 2017

	Mayo Station Unit 1
(A) MDC (mW)	746
(B) Period Hrs	720
(C) Net Generation (mWh)	60,874
(D) Net mWh Possible in Period	537,120
(E) Equivalent Availability (%)	60.00
(F) Output Factor (%)	45.35
(G) Capacity Factor (%)	11.33

Notes:

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Duke Energy Progress
Intermediate Power Plant Performance Review Plan
April 2017

Roxboro Station

		Unit 2	Unit 3	Unit 4
(A)	**MDC (mW)**	673	698	711
(B)	**Period Hrs**	720	720	720
(C)	**Net Generation (mWh)**	121,735	86,481	-608
(D)	**Net mWh Possible in Period**	484,560	502,560	511,920
(E)	**Equivalent Availability (%)**	96.25	91.48	23.33
(F)	**Output Factor (%)**	60.42	49.77	0.00
(G)	**Capacity Factor (%)**	25.12	17.21	0.00

Notes:

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- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

Duke Energy Progress
Base Load Power Plant Performance Review Plan

May 2016 - April 2017
Brunswick Nuclear Station

	Unit 1		Unit 2	
(A) MDC (mW)	938		932	
(B) Period Hours	8760		8760	
(C) Net Gen (mWh) and Capacity Factor (%)	8,160,307	99.31	7,150,691	87.58
(D) Net mWh Not Gen due to Full Schedule Outages	70,647	0.86	691,653	8.47
* (E) Net mWh Not Gen due to Partial Scheduled Outages	45,599	0.55	213,836	2.62
(F) Net mWh Not Gen due to Full Forced Outages	0	0.00	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	-59,673	-0.72	108,140	1.33
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00	0	0.00
* (I) Core Conservation	0	0.00	0	0.00
(J) Net mWh Possible in Period	8,216,880	100.00%	8,164,320	100.00%
(K) Equivalent Availability (%)		97.86		90.32
(L) Output Factor (%)		100.17		95.69
(M) Heat Rate (BTU/NkWh)		10,409		10,810

*** Estimate**
FOOTNOTE: D and F Include Ramping Losses

Duke Energy Progress
Base Load Power Plant Performance Review Plan

May 2016 - April 2017
Harris Nuclear Station

	Unit 1	
(A) MDC (mW)	928	
(B) Period Hours	8760	
(C) Net Gen (mWh) and Capacity Factor (%)	7,493,593	92.18
(D) Net mWh Not Gen due to Full Schedule Outages	534,528	6.58
* (E) Net mWh Not Gen due to Partial Scheduled Outages	50,574	0.62
(F) Net mWh Not Gen due to Full Forced Outages	229,432	2.82
* (G) Net mWh Not Gen due to Partial Forced Outages	-178,847	-2.20
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00
* (I) Core Conservation	0	0.00
(J) Net mWh Possible in Period	8,129,280	100.00%
(K) Equivalent Availability (%)		90.25
(L) Output Factor (%)		101.74
(M) Heat Rate (BTU/NkWh)		10,474

*** Estimate**
FOOTNOTE: D and F Include Ramping Losses

Duke Energy Progress
Base Load Power Plant Performance Review Plan

May 2016 - April 2017
Robinson Nuclear Station

Unit 2

(A) MDC (mW)	**741**	
(B) Period Hours	**8760**	
(C) Net Gen (mWh) and Capacity Factor (%)	**5,574,669**	**85.88**
(D) Net mWh Not Gen due to Full Schedule Outages	**904,402**	**13.93**
*** (E) Net mWh Not Gen due to Partial Scheduled Outages**	**7,724**	**0.12**
(F) Net mWh Not Gen due to Full Forced Outages	**97,281**	**1.50**
*** (G) Net mWh Not Gen due to Partial Forced Outages**	**-92,916**	**-1.43**
*** (H) Net mWh Not Gen due to Economic Dispatch**	**0**	**0.00**
*** (I) Core Conservation**	**0**	**0.00**
(J) Net mWh Possible in Period	**6,491,160**	**100.00%**
(K) Equivalent Availability (%)		**84.05**
(L) Output Factor (%)		**101.55**
(M) Heat Rate (BTU/NkWh)		**10,541**

*** Estimate**
FOOTNOTE: D and F Include Ramping Losses

Duke Energy Progress
Base Load Power Plant
Performance Review Plan
May, 2016 through April, 2017

Lee Energy Complex

	Unit 1A	Unit 1B	Unit 1C	Unit ST1	Block Total
(A) MDC (mW)	200	199	201	379	979
(B) Period Hrs	8,760	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,270,621	1,339,766	1,270,482	2,382,844	6,263,713
(D) Capacity Factor (%)	72.59	76.93	72.22	71.87	73.12
(E) Net mWh Not Generated due to Full Scheduled Outages	198,666	134,398	210,789	244,528	788,382
(F) Scheduled Outages: percent of Period Hrs	11.35	7.72	11.98	7.38	9.20
(G) Net mWh Not Generated due to Partial Scheduled Outages	35,248	38,038	34,488	93,680	201,455
(H) Scheduled Derates: percent of Period Hrs	2.01	2.18	1.96	2.83	2.35
(I) Net mWh Not Generated due to Full Forced Outages	38,257	317	11,361	259,811	309,746
(J) Forced Outages: percent of Period Hrs	2.19	0.02	0.65	7.84	3.62
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	33,846	33,846
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	1.02	0.40
(M) Net mWh Not Generated due to Economic Dispatch	207,551	229,065	232,056	300,915	969,587
(N) Economic Dispatch: percent of Period Hrs	11.86	13.15	13.19	9.08	11.32
(O) Net mWh Possible in Period	1,750,344	1,741,584	1,759,176	3,315,624	8,566,728
(P) Equivalent Availability (%)	83.87	90.94	86.35	80.95	84.43
(Q) Output Factor (%)	85.34	87.58	87.13	84.76	85.94
(R) Heat Rate (BTU/NkWh)	9,491	9,479	9,442	3,799	7,313

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- (R) Includes Light Off BTU's

Duke Energy Progress
Base Load Power Plant
Performance Review Plan
May, 2016 through April, 2017

Richmond County Station

	Unit 7	Unit 8	Unit ST4	Block Total
(A) MDC (mW)	175	173	170	518
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	982,346	960,358	1,118,378	3,061,082
(D) Capacity Factor (%)	64.31	63.42	75.12	67.56
(E) Net mWh Not Generated due to Full Scheduled Outages	386,299	387,830	385,399	1,159,528
(F) Scheduled Outages: percent of Period Hrs	25.29	25.61	25.89	25.59
(G) Net mWh Not Generated due to Partial Scheduled Outages	19,473	19,417	5,653	44,542
(H) Scheduled Derates: percent of Period Hrs	1.27	1.28	0.38	0.98
(I) Net mWh Not Generated due to Full Forced Outages	4,438	10,747	0	15,184
(J) Forced Outages: percent of Period Hrs	0.29	0.71	0.00	0.34
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	7,508	7,508
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.50	0.17
(M) Net mWh Not Generated due to Economic Dispatch	135,021	135,977	0	242,900
(N) Economic Dispatch: percent of Period Hrs	8.84	8.98	0.00	5.36
(O) Net mWh Possible in Period	1,527,576	1,514,328	1,488,840	4,530,744
(P) Equivalent Availability (%)	73.00	72.24	73.17	72.92
(Q) Output Factor (%)	86.74	86.92	101.54	91.68
(R) Heat Rate (BTU/NkWh)	11,474	11,330	0	7,237

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Duke Energy Progress
Base Load Power Plant
Performance Review Plan
May, 2016 through April, 2017

Richmond County Station

	Unit 9	Unit 10	Unit ST5	Block Total
(A) MDC (mW)	196	196	249	641
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,365,294	1,382,355	1,839,804	4,587,453
(D) Capacity Factor (%)	79.58	80.57	84.46	81.78
(E) Net mWh Not Generated due to Full Scheduled Outages	193,887	189,389	220,603	603,878
(F) Scheduled Outages: percent of Period Hrs	11.30	11.04	10.13	10.76
(G) Net mWh Not Generated due to Partial Scheduled Outages	21,795	22,005	20,554	64,354
(H) Scheduled Derates: percent of Period Hrs	1.27	1.28	0.94	1.15
(I) Net mWh Not Generated due to Full Forced Outages	3,670	878	6,855	11,403
(J) Forced Outages: percent of Period Hrs	0.21	0.05	0.31	0.20
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	131,018	121,038	90,566	342,622
(N) Economic Dispatch: percent of Period Hrs	7.64	7.05	4.16	6.11
(O) Net mWh Possible in Period	1,715,664	1,715,664	2,178,382	5,609,710
(P) Equivalent Availability (%)	87.17	87.51	88.63	87.88
(Q) Output Factor (%)	90.65	90.98	94.82	92.38
(R) Heat Rate (BTU/NkWh)	11,450	11,341	0	6,825

Notes:

- Effective January 2017, a change in capacity rating methodology could impact performance trending against historical results reported prior to January 2017.
- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

Duke Energy Progress
Base Load Power Plant
Performance Review Plan
May, 2016 through April, 2017

Sutton Energy Complex

	Unit 1A	Unit 1B	Unit ST1	Block Total
(A) MDC (mW)	202	202	266	670
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,457,019	1,471,726	1,807,267	4,736,012
(D) Capacity Factor (%)	82.42	83.25	77.71	80.80
(E) Net mWh Not Generated due to Full Scheduled Outages	60,498	39,947	47,339	147,785
(F) Scheduled Outages: percent of Period Hrs	3.42	2.26	2.04	2.52
(G) Net mWh Not Generated due to Partial Scheduled Outages	40,233	39,501	25,276	105,010
(H) Scheduled Derates: percent of Period Hrs	2.28	2.23	1.09	1.79
(I) Net mWh Not Generated due to Full Forced Outages	0	2,899	2,474	5,373
(J) Forced Outages: percent of Period Hrs	0.00	0.16	0.11	0.09
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	2,883	2,883
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.12	0.05
(M) Net mWh Not Generated due to Economic Dispatch	210,114	213,791	440,432	864,337
(N) Economic Dispatch: percent of Period Hrs	11.89	12.09	18.94	14.75
(O) Net mWh Possible in Period	1,767,864	1,767,864	2,325,672	5,861,400
(P) Equivalent Availability (%)	94.82	95.81	96.66	95.55
(Q) Output Factor (%)	85.97	86.45	79.47	83.51
(R) Heat Rate (BTU/NkWh)	11,448	11,345	0	7,048

Notes:

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- (R) Includes Light Off BTU's

Duke Energy Progress
Intermediate Power Plant
Performance Review Plan
May, 2016 through April, 2017

Mayo Station

Units	Unit 1
(A) MDC (mW)	737
(B) Period Hrs	8,760
(C) Net Generation (mWh)	2,079,227
(D) Net mWh Possible in Period	6,451,056
(E) Equivalent Availability (%)	87.90
(F) Output Factor (%)	52.60
(G) Capacity Factor (%)	32.23

Notes:

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Duke Energy Progress
Intermediate Power Plant
Performance Review Plan
May, 2016 through April, 2017

Roxboro Station

Units	Unit 2	Unit 3	Unit 4
(A) MDC (mW)	672	695	705
(B) Period Hrs	8,760	8,760	8,760
(C) Net Generation (mWh)	2,433,887	2,367,453	1,929,644
(D) Net mWh Possible in Period	5,886,648	6,083,568	6,170,952
(E) Equivalent Availability (%)	94.98	91.64	87.91
(F) Output Factor (%)	73.27	64.41	70.19
(G) Capacity Factor (%)	41.35	38.92	31.27

Notes:

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- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

Duke Energy Progress
Outages for 100 mW or Larger Units
April, 2017

Unit Name	Capacity Rating (mW)	Full Outage Hours		
		Scheduled	Unscheduled	Total
Brunswick 1	938	75.32	0.00	75.32
Brunswick 2	932	404.15	0.00	404.15
Harris 1	928	0.00	0.00	0.00
Robinson 2	741	173.15	0.00	173.15

Duke Energy Progress
Outages for 100 mW or Larger Units
April 2017

Unit Name	Capacity Rating (mW)	Full Outage Hours		Total Outage Hours
		Scheduled	Unscheduled	
Asheville Steam 1	192	720.00	0.00	720.00
Asheville Steam 2	192	0.00	0.00	0.00
Asheville CT 3	185	0.00	0.00	0.00
Asheville CT 4	185	469.73	0.00	469.73
Darlington CT 12	133	9.00	0.00	9.00
Darlington CT 13	133	9.00	0.00	9.00
Lee Energy Complex CC 1A	223	132.88	0.00	132.88
Lee Energy Complex CC 1B	222	0.00	0.00	0.00
Lee Energy Complex CC 1C	223	0.00	0.00	0.00
Lee Energy Complex CC ST1	379	0.00	127.75	127.75
Mayo Steam 1	746	288.00	0.00	288.00
Richmond County CC 1	183	113.00	0.00	113.00
Richmond County CC 2	183	0.00	0.00	0.00
Richmond County CC 3	185	0.00	0.00	0.00
Richmond County CC 4	186	18.45	3.60	22.05
Richmond County CC 6	179	75.08	75.53	150.62
Richmond County CC 7	189	185.90	2.13	188.03
Richmond County CC 8	189	186.30	0.00	186.30
Richmond County CC ST4	175	199.25	0.00	199.25
Richmond County CC 9	214	372.75	0.50	373.25
Richmond County CC 10	214	334.55	0.00	334.55
Richmond County CC ST5	248	340.25	1.80	342.05

Notes:

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Duke Energy Progress
Outages for 100 mW or Larger Units
April 2017

Unit Name	Capacity Rating (mW)	Full Outage Hours		Total Outage Hours
		Scheduled	Unscheduled	
Roxboro Steam 1	380	0.00	102.00	102.00
Roxboro Steam 2	673	27.00	0.00	27.00
Roxboro Steam 3	698	23.00	0.00	23.00
Roxboro Steam 4	711	552.00	0.00	552.00
Sutton Energy Complex CC 1A	225	0.00	0.00	0.00
Sutton Energy Complex CC 1B	225	0.00	0.00	0.00
Sutton Energy Complex CC ST1	267	0.00	0.00	0.00
Wayne County CT 10	192	106.00	0.00	106.00
Wayne County CT 11	192	106.00	0.00	106.00
Wayne County CT 12	193	106.00	0.00	106.00
Wayne County CT 13	185	155.00	0.00	155.00
Wayne County CT 14	197	0.00	11.88	11.88

Notes:

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- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.